

Is the COVID-19 vaccine contraindicated with a history of blood clots in the varicose veins, in the past?

A patient query

Dear Doctor Harold

I am due for the Astra Zeneca next week. I am 78 years old & in view of the recent reports re clotting somewhat concerned, though assured by my GP & others hopefully all will be well. I was taking aspirin for over 25 years since I had a superficial clot on my calf. However, in the last 3 or years I have not been taking it on the opinion of three medical professionals including my GP that unless you have had a heart condition there is no need to take it. Since I am to have the Astra COVID vaccine I spoke to my GP & he said if I wish I can take it for a few days. I am wondering what I should do to start taking the cartia daily for some time or just once a week like my vascular surgeon suggested when I saw him re my varicose veins. I would like to have your views on this & I will discuss with my GP & act on what he says.

Thanking you

With kindest regards

Lorensz



My reply:

Let me first explain the difference between blood clots in the superficial varicose veins beneath your skin (subcutaneous) and the deep veins in your leg referred to as deep vein thrombosis (DVT).

There are two sets of veins in your lower limbs for the low in oxygen blood to return to the lungs through the heart for reoxygenation.

The main superficial vein is referred to as the 'Long Saphenous Vein' which extends from the inner aspect of the ankle region to the inner side of the groin which connects to the main deeper vein.

This superficial main long vein and its it minute branches can undergo distension and become varicosed.

The minute dilated venous capillaries seen under the skin are referred to as spider naevi. They give no problems other than unsightly for cosmetic reasons. They can be destroyed by cauterising or burning them



through a fine probe under minimal local anaesthesia. Or you could sclerosed them by injecting sclerosing agents.

These superficial veins in your lower limbs are generally thin walled and have fewer smooth muscles unlike the arteries. To prevent the venous blood getting stagnant and smooth flow on its route to the right heart, against the pull of gravity, there are valves to prevent reflux of the venous blue blood.

Now in the first stage of varicose veins they seem to get distended due to many factors, such as pregnancy, constipation, being overweight and obesity.

The valves that prevent reflux of blood in these superficial veins become incompetent due to the distension of the veins or may be born with defective valves.

Veins can accommodate increased blood volume through distension.

The next stage after distension of the veins is that they become tortuous due to the stretching of the veins.

So varicose veins can be defined as veins that have got enlarged, swollen, and twisted, often appearing blue or dark purple on a white skin.

During the early stages they are benign and have no symptoms and are only a cosmetic concern. Some may complain of aching pain and discomfort.

Treatment at this is to keep the vessels compressed with stockinette, or crepe bandages, and do specific exercises. It is advisable to keep legs elevated in the sitting position or in bed to improve the drainage of the venous blood.

Lorenz in his history of his varicose veins says that he had a blood clot in one of these varicose veins and has been taking aspirin for 25 years and stopped on the instructions of his GP.

He is concerned that he may be a candidate for cerebral venous blood clots and whether he should take the COVID-19 vaccine jab.

Yes, there are a few complications of varicose veins, and the commonest would be a blood clot, or those just under the skin may burst on deep scratching or mild trauma.

Taking aspirin for these minute blood clots in the superficial varicose veins is not the answer to dissolve these clots.

Just applying the compression stockinet, with time will dissolve and resolve the clot with no further treatment required. These clots do not travel towards the heart and lungs, unlike the clots formed in the deep veins referred to as DVT.

The reason being that in blood clots in these superficial veins is stuck to the walls due to some form of inflammation, and the condition is referred to as thrombophlebitis. On the other hand, in the deeper veins the clots can get detached

and travel towards the heart and lungs. This condition is referred to as phlebothrombosis, and the moving clot is referred to as an embolus.

Deep vein thrombosis is a more serious condition. That could occur in people having congestive heart failure, or those who are immobile following surgery, mainly abdominal surgery, and debilitating illnesses.

Obese people can get DVT due to inactivity or travelling in the sitting position for long hours as in a plane journey.

There is some incidence of DVT among women who take the contraceptive pill.

Peripheral hearts

Your calf muscles are your second heart. The body is engineered so that on walking, the calf muscles pump venous blood back towards your heart. There are expanded veins within your calf muscles, serving as reservoirs, and frequent pumping or pushing upwards against gravity on walking and exercising, facilitates the de oxygenated blood to travel towards the heart.

So, the bottom-line is that having a clot in a varicose vein in the past or presently, is no contraindication for having the COVID-19 vaccine.

In COVID-19 the blood clots occur in the brain sinuses due to activation of the platelets, due to damage to the inner lining of those sinuses, collagen and the fibrin in the locality assists forming the blood clot.

So, Lorensz, go ahead with the jab, as there are more complications of not having the jab, from COVID-19.

Hope this article explains the situation.

Dr. Harold

Website: www.Doctorharold.com